

**Patent Claims****RECEIVED  
ART 34 AMDT**

1. Method of controlling operation of at least one transmitter and/or one receiver in a communication system, e.g. a system for transmission of control signals, request  
5 signals, interrogation signals etc.,  
whereby a signal comprising a message frame transmitted from a transmitter to a receiver comprises a message part indicative of the time of transmission for a later signal, and  
whereby a transition of said least one transmitter and/or one receiver from and/or into  
10 a power saving state is facilitated.
2. Method according to claim 1, c h a r a c t e r i z e d i n that said message part indicative of the time of transmission for a later signal, e.g. a later dataframe relates to the time of transmission for a following signal to be transmitted to said receiver.  
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3. Method according to claim 1 or 2, c h a r a c t e r i z e d i n that said message part indicative of the time of transmission relates to a period of time following the signal in question.
- 20 4. Method according to claim 1 or 2, c h a r a c t e r i z e d i n that said message part indicative of the time of transmission relates to a point of time relating to a timing reference, e.g. a timing reference established at each node or at least at one of the nodes involved.
- 25 5. Method according to one or more of claims 1 - 4, c h a r a c t e r i z e d i n that said transmitter is brought into a special mode, e.g. a sleep mode, a power conserving mode, after having concluded transmission of said signal, preferably after receipt of a confirmation signal from said receiver.
- 30 6. Method according to claim 5, c h a r a c t e r i z e d i n that said transmitter is controlled to wait a predetermined time for a response from said receiver, and, if no response is received, to retransmit said signal.

PCT/AR/2003/000633  
ART 34 A/DT

7. Method according to claim 6, characterized in that said transmitter is controlled to retransmit said signal a predetermined number of times, if no response is received.

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8. Method according to one or more of claims 5 - 7, characterized in that said transmitter is controlled to be brought into normal operating mode at - or before - the time of transmission indicated by said message part.

10 9. Method according to one or more of claims 1 - 8, characterized in that said receiver is brought into a special mode, e.g. a sleep mode, a power conserving mode, after having received said signal, preferably after having transmitted a confirmation signal and possibly after a further retransmission time.

15 10. Method according to claim 9, characterized in that said receiver is controlled to transmit a confirmation signal after having received said signal from the transmitter, and that the receiver subsequently will wait in a receive mode for a retransmission from the transmitter.

20 11. Method according to claim 10, characterized in that said receiver will wait in the receive mode for a period of time corresponding to at least a transmission slot for the transmitter before entering said special mode.

25 12. Method according to one or more of claims 9 - 11, characterized in that said receiver is controlled to be brought into normal operating mode at - or before - the time of transmission indicated by said message part.

30 13. Method according to one or more of claims 1 - 12, characterized in that said method comprises steps of resuming synchronization, e.g. in case said receiver has not received said time indicative message part or in case said transmitter has not received confirmation from said receiver of receipt of said time indicative message part.

14. Method according to claim 13, characterized in that said steps of resuming synchronization comprises the step of altering the operating mode of the transmitter until a communication has been established with the receiver, where after  
5 normal operating mode may be resumed.

15. Method according to claim 14, characterized in that said steps of resuming synchronization comprises the step of altering the operating mode of the transmitter unit to a long preamble mode.

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16. Method according to claim 13, 14 or 15, characterized in that said steps of resuming synchronization comprises the step of altering the operating mode of the receiver until a communication has been established with the transmitter, where after normal operating mode may be resumed.

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17. Method according to claim 16, characterized in that said steps of resuming synchronization comprises the step of altering the operating mode of the receiver unit to a long preamble mode.

20 18. Method according to one or more of claims 1 - 17, characterized in that said special mode of said transmitter and/or said receiver comprises a sleep mode, e.g. a low power consumption mode of a radio frequency operating part, e.g. a radio frequency transmitter or a receiver, respectively.

25 19. Method according to one or more of claims 1 - 18, characterized in that said at least one transmitter and/or at least one receiver each may form part of a node comprising a transceiver arrangement.

30 20. Method according to one or more of claims 1 - 19, characterized in that said communication system comprises at least two nodes, each comprising at least a transmitter and/or a receiver for wireless transmission, e.g. radio frequency transmission.

21. Method according to one or more of claims 1 - 20, c h a r a c t e r i z e d i n that said time of transmission for a later signal is selected randomly, preferably from a predetermined interval.
- 5 22. Communication system comprising at least one transmitter and one receiver, e.g. a system for transmission of control signals, request signals, interrogation signals etc. wherein
- said at least one transmitter is designed to be able to include a message part indicative of the time of transmission for a later signal when transmitting a signal to
- 10 said at least one receiver, and
- wherein said system comprises means for facilitating a transition of said at least one transmitter and/or one receiver from and/or into a power saving state in dependence on said message part indicative of the time of transmission for a later signal.
- 15 23. Communication system according to claim 22, c h a r a c t e r i z e d i n that said at least one transmitter and/or one receiver comprise timing means.
24. Communication system according to claim 22 or 23, c h a r a c t e r i z e d i n that said at least one receiver comprises control means for switching between at
- 20 least two modes of operation in dependence on a received message part indicative of the time of transmission for a later signal.
25. Communication system according to claim 22, 23 or 24, c h a r a c t e r i z e d i n that said at least one transmitter comprises control means for switching between
- 25 at least two modes of operation in dependence on a transmitted message part indicative of the time of transmission for a later signal.
26. Communication system according to claim 24 or 25, c h a r a c t e r i z e d i n that said at least two modes of operation comprise a normal operating mode and
- 30 a sleep mode, e.g. a power conserving mode.

27. Communication system according to claim 26, characterized in that  
that said sleep mode, e.g. a power conserving mode of said transmitter and/or said  
receiver comprises sleep mode, e.g. a low power consumption mode of a radio  
frequency operating part, e.g. a radio frequency transmitter or a receiver,  
5 respectively.

28. Communication system according to one or more of claims 22 - 27,  
characterized in that said at least one transmitter and/or said at least one  
receiver comprises battery power supply means.

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29. Communication system according to one or more of claims 22 - 28,  
characterized in that said at least one transmitter and/or said at least one  
receiver comprises means, e.g. control means for determining a lack of synchronicity  
and means for initiating a synchronization resumption process.

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30. Communication system according to one or more of claims 22 - 29,  
characterized in that said system is designed to operate in accordance  
with a method according to one or more of claims 1 - 21.

20 31. Use of method according to one or more of claims 1 - 21 and/or system  
according to one or more of claims 22 - 30 for updating of measures values in e.g.  
control, request and/or interrogation systems.

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